



# Class II Ceramic Disc Capacitors (RoHS Compliant) CDR Series

## FEATURES

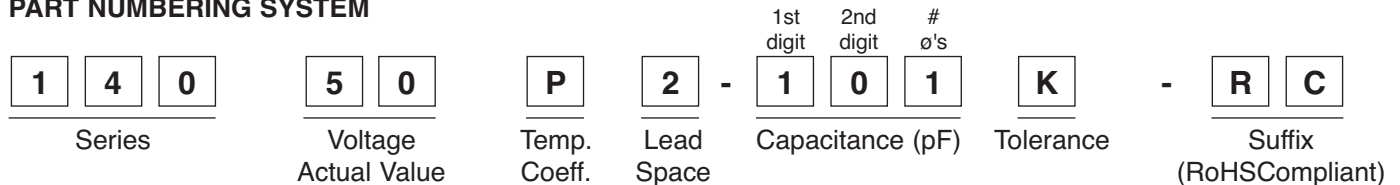
- Large capacitance in small sizes
- Non linear temperature coefficient of capacitance.



## CHARACTERISTICS

Item	Characteristics
Operating Temperature Range	-25°C ~ +85°C
Capacitance Tolerance (min.)	Within the tolerance at 1MHz, 1~3Vrms, 25°C
Working Voltage (WVDC)	50WV, 100WV, or 500WV
Insulation Resistance	10,000MΩ min. or 200MΩμF, whichever is less
Test Voltage	2.5 x WVDC
Life Test	At 2 x WVDC @85°C for 1000 hours @ 85°C, capacitors shall meet the following: the capacitance change for Y5P will be ±10%; Z5U will be ±20%; Z5V will be ±30%; the dissipation factor for Y5P and Z5U will be ≤50x10 <sup>-3</sup> ; Z5V will be ≤75x10 <sup>-3</sup> .
Humidity Test	At exposure in the ambient temperature of 40°C, and at 95% RH for 500 hours: the capacitance change for Y5P will be ±10%; Z5U will be ±20%; Z5V will be ±30%; the dissipation factor for Y5P and Z5U will be ≤50x10 <sup>-3</sup> ; Z5V will be ≤75x10 <sup>-3</sup> .

## PART NUMBERING SYSTEM



Temp. Coeff.	Code
Y5P	<b>P</b>
Z5U	<b>Z</b>
Z5V	<b>Q</b>

Lead Space	Code
2.5mm	<b>2</b>
5.0mm	<b>5</b>
9.5mm	<b>9</b>

Tolerance	Code
±0.25pF	<b>C</b>
±5%	<b>J</b>
±10%	<b>K</b>

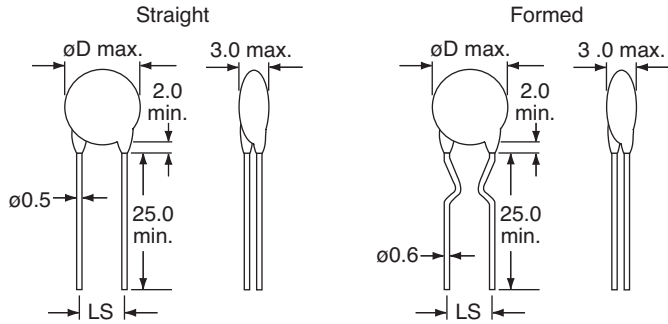
Tolerance	Code
±20%	<b>M</b>
±0.5pF	<b>D</b>
+80/-20%	<b>Z</b>

## TEMPERATURE COEFFICIENT CHARACTERISTICS

Temperature Coefficient	Y5P	Z5U	Z5V
Operating Temp. Range	-25°C ~ +85°C	+10°C ~ +85°C	+10°C ~ +85°C
Capacitance Change	±10%	+20%, -55%	+30%, -80%



## ■ DIMENSIONS (mm), CAPACITANCE RANGES (pF)



Dimensions		Working Voltage (WV); Temperature Coefficient; Capacitance Range (pF)				
		50 and 100			500	
$\phi D$ (mm)	LS (mm)	Y5P	Z5U	Z5V	Y5P	Z5U
5	2.5/5.0	200 ~ 2200	1000 ~ 5000	1000 ~ 10000	150 ~ 270	1000 ~ 2200
6	2.5/5.0	2700 ~ 3000	6800 ~ 8200	---	390 ~ 1200	3700 ~ 3900
7.5	2.5/5.0	3300 ~ 3900	10000	20000 ~ 22000	1500 ~ 2000	---
8.5	2.5/5.0	4700 ~ 5600	---	---	2200 ~ 2700	4700 ~ 5000
9.5	5.0	6800 ~ 8200	---	---	3000 ~ 3300	6800 ~ 8200
10.5	5.0	10000	20000 ~ 22000	---	3900	10000
14.5	9.5	---	---	33000 ~ 100,000	---	---

## ■ TYPICAL TEMPERATURE CHARACTERISTICS

